

8th Annual Institute for Genomics & Bioinformatics (IGB) Biomedical Informatics Training (BIT) Program Symposium

Donald Bren Hall 6011
Wednesday, May 19th 2010

8:45-8:55 Opening Remarks by Pierre Baldi
8:55-9:00 Symposium Format by Michael Zeller

Morning Session I – Chemoinformatics

9:00-9:20 *The Significance of Chemical Similarity Scores*
Ramzi Nasr, Pierre Baldi
9:20-9:40 *Ranking molecular orbital interactions*
Matthew Kayala, Chloe-Agathe Azencott, James Nowick, Pierre Baldi

Morning Session II – Proteomics and Drug Discovery

9:40-10:00 *A Molecular Dynamics Study of the AQP0-CaM Interaction*
Daniel Clemens, J Alfredo Freites, Katalin Kalman, Doug Tobias, James Hall
10:00-10:20 *Annexin A2 as a model for structure-based drug design*
Gabriel Ozorowski, Hartmut Luecke
10:20-10:40 *Virtual drug screening for the heme degradation pathway in Mycobacterium tuberculosis.*
Paul Rigor, Robert Morse, Celia Goulding, Pierre Baldi
10:40-11:00 *Prediction of protein antigenicity using microarray data*
Christophe Magnan, **Michael Zeller**, Matthew Kayala, Philip Felgner, Pierre Baldi

11:00-12:20 PM Lunch Break

Afternoon Session I – Genomics

12:20-12:40 *Transcriptome-wide Quantitative Analyses of RNA Polyadenylation in Mouse Embryonic Stem Cells and Differentiated Cells using Poly(A) Site Deep Sequencing (PAS-Seq)*
Peter Shepard, Eun-A Choi, Jente Lu, Lisa Flanagan, Klemens Hertel, Yongsheng Shi
12:40-1:00 *Prediction of miRNA targets in Anopheles gambiae using a word-based comparative genomics approach*
Augustine Dunn, Anthony James, Xiaohui Xie
1:00-1:20 *Detecting Structural Variation in Natural Populations Via Paired-End Sequencing*
Julie Cridland, Kevin Thornton

1:20-1:40 Coffee Break

Afternoon Session II - Genomics

1:40-2:00 *Genome-wide maps of candidate regulatory motif sites*
Kenny Daily, Paul Rigor, Sholeh Forouzan, Yimeng Dou, Xiaohui Xie, Pierre Baldi
2:00-2:20 *A Map of Known Regulatory Motifs in Fly*
Jacob Biesinger, Kenny Daily, Paul Rigor, Rahul Warrior, Pierre Baldi, Xiaohui Xie
2:20-2:40 *Co-factor of LIM Transcriptional Regulation in Mammary Gland Development*
Michael Salmans, Padhraic Smyth, Bogi Andersen
2:40-3:00 *Mechanisms of Transcriptional Regulation by Cohesin in Cornelia de Lange Syndrome*
Aniello Infante, Daniel Newkirk, Kyoko Yokomori, Xiaohui Xie

Afternoon Session III - Systems Biology

3:00-3:20 *Sigmoid: Spatial and Compartmental Modeling for Pathway Bioinformatics and Systems Biology*
Ben Compani, Trent Su, Ivan Chang, Pierre Baldi, Eric Mjolsness
3:20-3:40 *Graph-Constrained Correlation Dynamics: approximation of dynamical systems*
Todd Johnson, Eric Mjolsness
3:40-4:00 *Incorporating Existing Network Information into Gene Network Inference*
Scott Christley, Qing Nie, Xiaohui Xie
4:00-4:20 Closing Remarks by G. Wesley Hatfield and Suzanne Sandmeyer.